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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,565	11/19/2003	Shinsuke Shiota	K2635.0077	5063

32172 7590 10/05/2006

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EXAMINER

SAFAIPOUR, BOBBAK

ART UNIT PAPER NUMBER

2618

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/715,565

Applicant(s)

SHIOTA ET AL.

Examiner

Bobbak Safaipoor

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/19/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 and 6-8 is/are allowed.
- 6) ☒ Claim(s) 4,5 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/19/2003 and 11/19/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements submitted on 11/19/2003 and 5/19/2005 have been considered by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to distinguish between a method and an apparatus.

More particularly, the preamble of **claim 9** states "A time-matching method" and the limitations of claim 9 is an apparatus.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claim 4** is rejected under 35 U.S.C. 102(e) as being anticipated by **Edge et al (United States Patent Application Publication #2003/0069033 A1)**.

Consider **claim 4**, Edge et al disclose a terminal device comprising:

a GPS receiver receiving a GPS-data from a GPS satellite and outputting said GPS-data (paragraph 30; figure 2; Mobile unit 106 includes two antennas, a GPS antenna 112 and a communications antenna 114 which are in communication with a GPS receiver 204 for receiving GPS data and signals via GPS antenna 112);

a data processing device connected to said GPS receiver and receiving said GPS-data from said GPS-receiver (paragraph 32; figure 2; Mobile unit 106 also includes a processor 206),

wherein said data processing device extracts a satellite time-data from said GPS-data (paragraphs 30 and 32; Mobile unit 106, which comprises a processor 206, includes two antennas, a GPS antenna 112 and a communications antenna 114 which are in communication with a GPS receiver 204 for receiving GPS data and signals via GPS antenna 112), executes a correction procedure on said satellite time-data to generate a corrected time-data, and transmits said corrected time-data to a destination on a wireless communication network (paragraphs 35, 36, 74 and 75; figure 3; When gathering GPS timing association, the GPS location estimate of the mobile unit 106, together with the known location, and if needed, known or provided internal electrical signaling delays of the base station, leads directly to a precise estimate of the propagation delays. The propagation delay so obtained is then added to the base station transmission timing reference provided by the mobile unit to obtain the actual transmission timing at the base station itself. The central authority 110 may be a Serving Mobile Location Center which has been additionally programmed to receive GPs data and timing information

Art Unit: 2618

from mobile units 106 via base stations 108, maintain the information to provide an association between GPS time and local base station time, and forward the timing association to mobile units 106 via base stations 108 to ensure that each device has accurate timing information),

said correction procedure being based on a time delay in communications between said GPS satellite and said GPS receiver (paragraphs 74 and 75; When gathering GPS timing association, the GPS location estimate of the mobile unit 106, together with the known location, and if needed, known or provided internal electrical signaling delays of the base station, leads directly to a precise estimate of the propagation delays. The propagation delay so obtained is then added to the base station transmission timing reference provided by the mobile unit to obtain the actual transmission timing at the base station itself).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Edge et al (United States Patent Application Publication #2003/0069033 A1)** in view of **Mitsugi (United States Patent #6,959,198 B2)**.

Consider **claim 5**, and as applied to **claim 4** above, Edge et al disclose the claimed invention except for wherein said data processing device adds to said corrected time-data, a priority-data indicative of reliability of said corrected time-data, and transmits said corrected time-data to said destination.

However, Mitsugi discloses as known in the art a network system and information communicating device with time correction wherein the GPS time data is distributed to each device through a network system when a device having a GPS receiver transmits information with a GPS time data attached. In this transmission of information, a reliability data for each device is also attached in addition to the GPS time to be usable as a judging criterion (col. 4, lines 25-31).

Therefore, it would have been obvious of one of ordinary skill in the art to incorporate the teachings of the Mitsugi into the system of Edge et al in order to indicate the reliability of the time.

Allowable Subject Matter

8. **Claims 1-3 and 6-8** are allowed.

9. The following is an Examiner's statement for reasons for allowance.

Consider **claim 1**, the best prior art of record found during the examination of the present application, **Edge et al (United States Patent Application Publication #2003/0069033 A1)** in view of **Mitsugi (United States Patent #6,959,198 B2)**, fail to specifically disclose, teach, or suggest a time-matching system comprising a communications relay device receives said first time-data, executes an intermediate correction procedure on said first time-data to generate an intermediate time-data, and transmits said intermediate time-data to said second terminal device, and said intermediate correction procedure being based on a time delay in communications between said first terminal device and said communications relay device.

Claims 2-3 are allowable because they are dependent upon claim 1.

10. Consider **claim 6**, the best prior art of record found during the examination of the present application, **Mitsugi (United States Patent #6,959,198 B2)** in view of **Mitsugi (United States Patent #6,959,198 B2)**, fail to specifically disclose, teach, or suggest a delay calculating unit executing said correction procedure on said intermediate time-data to generate a corrected time-data, said correction procedure being based on a time delay in communications between said wireless communications relay device and said delay calculating unit

Claim 7 is allowable because it is dependent upon claim 6.

11. Consider **claim 8**, the best prior art of record found during the examination of the present application, **Mitsugi (United States Patent #6,959,198 B2)** in view of **Mitsugi (United States Patent #6,959,198 B2)**, fail to specifically disclose, teach, or suggest a delay calculating unit executing said correction procedure on said intermediate time-data to generate a corrected time-data, said correction procedure being based on a time delay in communications between said wireless communications relay device and said delay calculating unit.

12. **Claims 9-12** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. Consider **claim 9**, the best prior art of record found during the examination of the present application, **Edge et al (United States Patent Application Publication #2003/0069033 A1)** in view of **Mitsugi (United States Patent #6,959,198 B2)**, fail to specifically disclose, teach, or suggest a communications relay device receiving said first time-data and generating an intermediate time-data by executing an intermediate correction procedure on said first time-data, said intermediate correction procedure being based on a time delay in communications between said first terminal device and said communications relay device and said communications relay device transmitting said intermediate time-data to a second terminal device different from said first terminal device.

Art Unit: 2618

Claims 10-12 are allowable because it is dependent upon claim 9.

Conclusion

14. **Yamazaki (U.S. Patent # 6,628,628 B1)** discloses wireless communication having operation time correcting function.

Sayers et al (U.S. Patent # 6,542,754 B1) disclose synchronizing clock signals in wireless networks.

Morohoshi et al (U.S. Patent # 6,219,303 B1) disclose Electronic device with clock function, time correction method and recording medium.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

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Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

Art Unit: 2618

Examiner should be directed to Bobbak Safaipour whose telephone number is (571) 270-1092.

The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

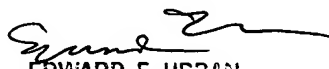
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Bobbak Safaipour
B.S./bs

October 1, 2006


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